

ABSTRACT OF THE DISCLOSURE

A hybrid switch actuator having six positions that are stable in the absence of current and in which displacement occurs between an initial position and a target position under the action of a current. The actuator includes a stator and a rotationally moveable rotor package. The stator has six pole shoes. Each pair of opposed pole shoes is equipped with a common exciting coil. The rotor package has two pairs of rotor poles magnetized transversely in alternate directions and a permanent magnet ring and two end caps adapted to be engaged around said permanent magnet ring. Each end cap is associated with two rotor poles having maximum radius regions that correspond to the area of each of the stator pole shoes and reduced radius regions positioned adjacent the maximum radius regions such that each rotor pole can be precisely aligned with each stator pole shoe.